



CITY OF SUNNYVALE

DEPARTMENT OF FINANCE

March 7, 2003

TO: Bob LaSala, City Manager

FROM: Mary Bradley, Director of Finance

SUBJECT: Review of FY 2001/2002 Performance Results for Program 452 – Emergency Preparedness

Attached for your review is the final audit report for the recently completed review of performance measures and activities for the Emergency Preparedness Program, Program 452. The report was prepared by Cheryl Waldrip and Pablo Federico, and reviewed by the Department of Public Safety, which has agreed with all of the audit team's recommendations. A summary of all recommendations is included as part of the Department's response at the end of the report.

The audit included:

- Testing of procedures outlined within each Standard Operating Procedure (SOP) to determine whether the procedures are clearly stated and understood by staff and whether they can be followed as described;
- Testing of performance values reported for FY 2001/2002 to ensure mathematical accuracy and to determine whether adequate documentation exists to support the reported results; and,
- Evaluation of whether the existing measures coordinate with the current efforts undertaken by the program.

It is recommended that this audit report be utilized as a resource in the pending restructure process. I'd like to take this opportunity to commend Public Safety staff, and in particular Capt. Kirk Sanfilippo, Capt. Mark Stivers and Lt. Doug Lamar, for their cooperation and assistance with the audit.

Program Audit Results

Emergency
Preparedness

February 2003

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Introduction

The program performance review of the Emergency Preparedness program commenced in late 2002 and was carried out as part of the effort to audit all City programs over the course of several years. This review was conducted in conjunction with the review of two other Public Safety programs: Animal Control and Police Services. A review of the Fire Services program commenced in early 2003. The fifth and final Public Safety program, Administrative and Technical Services, is slated for future review.

The FY 2002/2003 budget provides \$375,000 and 4,600 work hours for achievement of the Emergency Preparedness program goals. This represents less than 1% of the total Public Safety budget of \$47.9 million.

The purpose of the performance audit of the Emergency Preparedness Program was to review the FY 2001/2002 results of the program, SDP, and activity measures. During the audit, the audit team was greatly assisted by Capt. Kirk Sanfilippo, Capt. Byron Pipkin, Capt. Mark Stivers and Lt. Doug LaMar. Their full cooperation facilitated the audit process in a timely manner.

Scope and Methodology

Audit staff gathered and reviewed all written procedures (SOPs) for the program's outcome measures and activities. Staff evaluated the methodology employed for reporting results for FY 2001/2002, as well as the documentation used for those calculations and the mathematical accuracy of the reported figures. Although some findings and recommendations touch on the program's organization, operations, efficiency or efficacy, these elements were not the focus of the review. While some findings and recommendations relate to the merits of the measures themselves, this also was not the focus of the review.

Background

The Emergency Preparedness program exists for the purpose of enabling the community to be self-sufficient for the first 72 hours following a major disaster. As a result, the staff's primary focus is on training city employees, residents and businesses to handle emergency situations.

The existing Standard Operating Procedures (SOPs) for calculating the measures were approved in 1997. Since then, there have been significant changes in the program's measures and staff, and there have been significant changes in the environment in which the program operates.

Although staff still provides some assistance to businesses, the Sunnyvale Emergency Preparedness Organization (SEPO) has not been active for more than three years. Staff is unclear as to what business-related services Council would like staff to provide.

Moreover, staff believes that most businesses, particularly large businesses, do not need the services offered by this program because these services are now being provided by industry.

Since the inception of the Sunnyvale Neighborhoods Actively Prepare program (SNAP), the city has moved away from the concept of preparing citizens to respond to disasters by neighborhood. Therefore, the SNAP name is a misnomer. Some neighborhood groups still exist, but staff does not know how many there are. The measures that gauge SNAP performance are therefore no longer meaningful.

Summary of Findings

- 1. More than half of the FY 2001/2002 results reported for this program were not well documented.*

In some cases, results were estimated because no documentation is available; in other cases, the documentation is insufficient to enable replication of the reported results. In other cases, the available documentation is adequate but still could have been more thorough. While documentation issues do not mean that the reported results were not in fact achieved, it exposes the management to questions of credibility that generally could have been averted by better record keeping.

Documentation could have been better for 59 percent (16/27) of the reported results. Specifically, documentation could have been more thorough for the following measures and activities:

- Program Measure #1 and SDP 45202 Measure #5
 - Program Measure #2, SDP 45201 Measure #1 and SDP 45201 Measure #2
 - Program Measure #3 and SDP 45201 Measure #5
 - Program Measure #7 and Activity 452160 and SDP 45202 Measure #1
 - SDP 45201 Measure #7 and Activity 452010
 - Activity 452000
 - SDP 45202 Measure #2 and Activity 452170
 - SDP 45202 Measure #4
- 2. Results were incorrectly reported for some measures either because SOPs were not followed or because calculations were in error. This finding applies to the following measures:*
 - Program Measure #3 and SDP 45201 Measure #5
 - Program Measure #4
 - 3. Some measures have changed since the SOPs were developed.*

For instance, the SOPs for Program Measure #1 and SDP 45202 Measure #5 refer to an annual EMO exercise. The FY 2001/2002 measure, however, calls for bi-annual exercises.

4. The SOPs are generally confusing, vague and/or contain incorrect calculation methodologies.

The audit team concluded that every SOP needs revision either because it is out of date or because it is too confusing, vague, incomplete or incorrect. For instance, the SOP for Program Measure #2 does not provide adequate direction to program staff charged with calculating the measure.

5. Some measures are inconsistent with the actual efforts undertaken by this program and should be modified.

For instance, the SEPO program has not existed for three years but some measures continue to try to report SEPO results.

Audit Findings and Recommendations

Section I: Program Measure Findings and Recommendations Emergency Preparedness Program

Program Measure #1.

A review of the bi-annual EMO simulation exercises by the EMO leaders group determines that 80% of the pre-established simulation exercise goals were achieved. (% of goals)

Finding #1: The analysis staff used to arrive at the reported result was not as well documented as it could have been. Staff established six goals for its FY 2001/2002 exercise, which simulated a terrorist dumping gasoline down the city's storm drains. Staff reported that four of six goals (66.6%) were met. The planned goal for the measure was achievement of 80% of the exercise goals. The reported result was developed by the program's Captain and Lieutenant following review of the post-exercise report and feedback from participants. There is no standard methodology or criteria for determining what constitutes meeting a goal.

Recommendation #1: In the future, staff should prepare a more detailed post-exercise analysis report. The report should detail the criteria for meeting each goal and describe in detail staff's evidence that the criteria were met or not met. The current SOP calls for a post-exercise report to be prepared by the Emergency Preparedness staff but it does not define the content of the report. Staff should complete a standard report for each exercise. It should contain at least the following components:

- A. The list from Recommendation #3 below
- B. The pre-established, measurable goals for the exercise

- C. A detailed discussion of whether the goals were met and the documentation/evidence for the conclusions reached
- D. Recommendations for improvements/further training

Finding #2: The current measure is for a bi-annual exercise but the SOP was written for an annual exercise. In practice, one exercise has been carried out annually. Staff is unaware of an instance of exercises being carried out twice in one year. (It's possible that the intent of the change was to hold the exercises every two years instead of twice a year, since that is the secondary meaning of the word "bi-annual," and in fact, program staff believes this was the intended meaning.)

Recommendation #2: There are multiple possible solutions to this discrepancy. One option is to change the measure back to "annual." A second option is to conduct two exercises per year (or one exercise every other year.) Regardless, the SOP should be modified to clarify the intended frequency of the exercise. In the event of a change in service level, the budget should be evaluated for alignment with the expected service provision.

Finding #3: In FY 2001/2002, the exercise goals were written by the Emergency Planner. The SOP, however, states that the goals will be pre-determined by the EMO Leaders Group. The group is not defined in the SOP.

Recommendation #3: **A.** The SOP should define the EMO Leaders Group. **B.** The group, plus at least two other people who are members of EOC management from other cities or counties, should establish the exercise goals. The goals and the names and titles of those responsible for establishing them should be documented in writing.

Finding #4: The SOP does not require external critique of the exercise, feedback from participants, or documentation of individual critiques.

Recommendation #4: Require that the EMO Leaders Group and members of management of at least two local government EOCs submit critiques of the exercise that includes an assessment of whether each of the pre-established goals were met.

Finding #5: The current SOP offers no guidelines for preparing the goals. As a result, some goals have been prepared such that they are too broad to be meaningful. For example, one of the goals for FY 2001/2002 was: "To identify and anticipate required resources in support of emergency operations." This is too broad to be useful. As a consequence of the breadth of the goals, there are no guidelines for determining whether the goals are met. For instance, in FY 2001/2002, one of the six goals was "to develop and disseminate accurate information to the public in a timely manner." What constitutes timely? How is information to be disseminated? Who is supposed to develop what sort of information.

Recommendation #5: The SOP should require that the goals be written so that they materially "test" a key EMO function and that the goals define the criteria for being met.

For example, the goal listed above could be phrased as follows: “That within three hours of the beginning of the emergency, the EMO Captain will prepare and distribute via fax a press statement describing the nature of the emergency, what the City is doing to handle the emergency and what steps the public should take.” To ensure that goals materially test key functions, it may also be helpful to have input from more parties in the development of the goals.

Finding #6: The SOP requires establishment of so few goals – five – that meeting/not meeting a single goal represents a swing of as much as 20% in the outcome measure. This is potentially misleading when making comparisons across time.

Recommendation #6: Staff should consider whether to test a larger number of goals.

Program Measure #2.

80% of SNAP groups participate in a neighborhood emergency preparedness activity annually and the number of active groups grows from 52 to 55 in FY 1997/98 and 5% per year thereafter.

Staff calculated the FY 2001/2002 result as follows: Staff did not know the number of SNAP groups that participated in a neighborhood emergency preparedness activity. The number of existing groups was estimated by counting the number of names on a roster of attendees to a training held in June (15) and then adding an estimated number of “contacts” made during the year by Emergency Preparedness staff (12), for a total of 27. This total was divided by the 15 participants who attended the June training for a reported result of 55.5% for the first part of the measure. The goal was 80%. Since there was no known growth in the number of SNAP groups during the year, staff reported 0% growth of the number of active SNAP groups. The goal was 5%.

Finding #1: Since the inception of the Sunnyvale Neighborhoods Actively Prepare (SNAP) program, the City has moved away from the concept of preparing citizens to respond to disasters by neighborhood. Some neighborhood groups still exist, but the City does not know how many there are or if they are currently active. Therefore, the SNAP name is a misnomer and calculations involving the number of SNAP groups are difficult to compute. A few years ago, a database was developed that contained the names of “captains” of each neighborhood group, but that information has not been kept current. If someone attended a meeting several years ago, his or her name continues to be in the database whether he or she is currently participating or not.

Recommendation #1: The measure should be changed to reflect the number of individuals who attend training or participate in events during the year. Training individual people each year is what the program is actually doing. This change would eliminate the need to ascertain whether a “group” exists and whether that group is “active” or not – as well as the administrative hassle of database maintenance – in order to reflect the result of the program’s efforts. Staff could simply track the number of people trained from June to July. The goal could be established such that the program would train not fewer than the average number trained over the prior three years.

Finding #2: The SOP lists the goal as 75% of SNAP groups, but the budgeted goal is 80%.

Recommendation #2: Update the SOP to match the budget; or change the measure as suggested in Recommendation #1.

Finding #3: The SOP calculation method is murky. The measure is defined as the percentage of SNAP groups participating in an Emergency Preparedness activity in one year, but the SOP calculation methodology is:

SNAP Captains Provided Assistance /SNAP Captains;
An active group is defined as one that has been active in the last 1.5 years.

Judging from the definition in the SOP, it is not clear what constitutes “assistance provided,” or “participation,” or what constitutes “active,” or why the methodology mixes data for 12 months and 18 months in the same measure.

Recommendation #3: Change the measure as suggested in Recommendation #1.

Finding #4: To determine the percentage of groups participating in an activity annually, staff must know: 1) The total number of existing groups and 2) the number that participated in some type of activity within the fiscal year. Neither of these two pieces of data was adequately maintained by staff in FY 2001/2002. The database for tracking participants, as specified in the SOP, is outdated.

Recommendation #4: Either the measure should be changed per Recommendation #1, to eliminate the need for the database, or staff should update and maintain the database so that it accurately captures the number of active groups and participants.

Finding #5: The term “groups” is an outgrowth of the idea that staff is training neighborhood “captains” who represent an unseen but assumed group of neighbors. The training is no longer neighborhood based and staff is tracking and training individuals instead.

Recommendation #5: Change the measure per Recommendation #1 to reflect the fact that staff is training individuals.

Finding #6: The second portion of the measure requires 5% growth per year in the number of active groups. This part of the measure is a) unsustainable over time, b) of limited value as an indicator of program effectiveness, and c) heavily influenced by factors that are outside the control of staff, such as the length of time since the occurrence of a local emergency.

Recommendation #6: Per Recommendation #1, change the measure such that “growth” in participation is not required. Instead, require maintenance of a minimum number of

individuals trained in a year. (For instance, the number could be expected to be not less than the three-year average.)

Program Measure #3.

Post-instruction surveys of SNAP and SEPO participants reveal an 85% feeling of competency in applying the provided information. (percent of survey participants)

Finding #1: The reported result for FY 2001/2002 was not properly documented. First, the necessary survey question was not asked of class participants. The survey that was administered to class participants did not ask them to rate their feeling of competency in applying the covered material. Therefore, the data needed to report this measure does not exist. Additionally, the calculation that was carried out was unable to be replicated by the audit team using the source documents staff provided.

Staff described the calculation as follows: There were 46 participants in a June SNAP training session. Of these 46 participants, staff was able to locate 12 completed surveys (26%). Since there was no question on the survey applicable to the participants' sense of their competency in applying the covered material, staff "extrapolated" a result based on responses to other, unrelated questions. Staff concluded that 11 of the 12 had favorable ratings of the class, and thus reported a result of 91.7% for the measure. The source documents are inconsistent with the calculation description. Source documents were: a list of 41 attendees to Disaster Prep SNAP Training on June 26 and 10 completed surveys.

Recommendation #1: The question(s) staff is expected to include in the survey should be specified in the SOP.

Recommendation #2: The SOP should specify that staff must maintain documentation of the number of participants, physically retain the completed surveys and file them by fiscal year.

Finding #2: This measure lumps together the outcomes of two different services, one of which no longer exists (SEPO) and therefore is not reflected in the result. Moreover, the term "SNAP groups" is an outgrowth of the idea that staff is training neighborhood "captains" who represent an unseen but assumed group of neighbors. The training is no longer neighborhood based and staff is tracking and training individuals instead.

Recommendation #3: The measure should be revised to exclude SEPO.

Program Measure #4.

A satisfaction rating of 90% is achieved for Emergency Preparedness. (rating)

Finding #1: The reported result was accurately calculated. Using the results from the external customer satisfaction survey for "Disaster Preparedness," staff added the "favorable" percentage (69%) from the June 2002 survey to the "favorable" percentage

from the December 2001 survey (74%) and divided by 2 for a 71.5% reported result.

Finding #2: It's unlikely that the majority of respondents to the surveys are sufficiently knowledgeable about the City's disaster preparedness efforts to express a meaningful opinion as to the quality of those efforts. Furthermore, asking a single question about the entire program is not particularly helpful. See Appendix A for details regarding this finding.

Recommendation #1: The City should explore development of a more robust survey design.

Finding #3: The SOP has the old measure goal of 85%. The current measure goal is 90% and the SOP methodology is no longer used as the survey is administered by the Gelfond Group.

Recommendation #2: Update the SOP to reflect current methods.

Program Measure #5.

The budget/cost ratio (planned cost/actual cost) is at 1.0 (ratio)

Finding #1: The reported results were properly calculated in FY 2001/2002 by dividing the budget for the program by the actual expenditures per the period 14 MBO.

Finding #2: The MBO structure has changed since the SOP was written.

Recommendation #1: Update the SOP to reflect the current MBO.

Program Measure #6.

Requests for Emergency Preparedness funding and disasters are accurately prepared and accepted by state and federal agencies 90% of the time. (% accepted)

Finding #1: For most years, the result of this measure has been "N/A" (as it was in FY 2001/2002) as a consequence of there being no disasters for which to request reimbursement. Since it measures activity that rarely occurs, the measure is of questionable merit as a guide to the program's efforts/effectiveness. However, management doesn't wish to eliminate it because its presence serves as insurance that applications for disaster reimbursements will be filed during those applicable years.

Recommendation #1: Consider eliminating the measure and incorporating the responsibility for this duty into the appropriate performance agreements.

Finding #2: It's unclear whether the measure is – or should be – applicable to applying for emergency preparedness grant funds.

Recommendation #2: Clarify the intent and adjust the SOP accordingly.

Finding #3: It's unclear how staff would track the information needed to calculate this result in the applicable years.

Recommendation #3: Establish clear procedures in the SOP.

Program Measure #7.

90% of city facilities inspected annually meet state non-structural guidelines for hazard mitigation with any deficiencies corrected within six weeks of inspection. (% of facilities)

Finding #1: Since the documentation is maintained and the inspections are coordinated by Human Resources, and the responsibility for correcting violations is assumed by the department, it is unclear why Emergency Preparedness is responsible for this measure. The lead staff on this effort, and the bulk of the funds for carrying out this work, is in Human Resources.

Recommendation #1: Move this measure to the Human Resources Department. Human Resources should be tasked with resolving any issues associated with this measure after it is moved.

Program Measure #8.

85% of Sunnyvale businesses participating in SEPO are provided assistance with emergency preparedness planning and training programs annually and the number of businesses participating grows from 220 to 225 in 97/98 and 2.5% each year thereafter. (% businesses/growth)

Finding #1: No result was reported for FY 2001/2002 because SEPO no longer exists. The absence of a result for this measure is in conflict with the presence of a result reported in activity 452020 – Provide Commercial Emergency Preparedness Programs. Staff reported a result of 89 SEPO participants in that activity.

Recommendation #1: Although SEPO no longer exists, staff in fact did provide emergency preparedness training to at least 86 businesses during FY 2001/2002. Audit staff believes the provision of these services could have been justifiably reported in this measure.

Recommendation #2: At a minimum, the measure should be revised to drop the SEPO name. It may make sense for the City to re-evaluate whether to provide these services at all.

Finding #2: It is not realistic to expect that staff would be able to increase the percentage of participants indefinitely.

Recommendation #3: Remove the requirement that staff sustain growth. Require instead maintenance of a base number of participants (such as an average of the past 3 years).

Section II: Service Delivery Plan Measure Findings and Recommendations

A. SDP 45201 - Community Emergency Preparedness Services

SDP 01 Measure #1.

85% of SNAP captains are provided assistance with emergency preparedness planning and training annually. (%)

See findings and recommendations regarding program measure #2.

SDP 01 Measure #2.

The number of SNAP groups grows from 52 to 55 in FY 97/98 and 5% per year thereafter. (growth)

See findings and recommendations regarding program measure #2.

SDP 01 – Measure #3

85% of Sunnyvale businesses participating in SEPO are provided assistance with emergency preparedness planning and training programs annually. (%)

See findings and recommendations regarding program measure #8.

SDP – 01 Measure #4.

The number of businesses participating in SEPO grows from 220 to 225 in 97/98 and 2.5% each year thereafter. (growth)

See findings and recommendations regarding program measure #8.

SDP 01 – Measure #5.

Post-instruction surveys of SNAP and SEPO participants reveal an 85% feeling of competency in applying the provided information. (% participants)

See findings and recommendations regarding program measure #3.

SDP 01- Measure #6.

Emergency preparedness information is provided at two annual city events. (Events)

Finding #1: Staff does not specifically track what information is distributed and at how many events. Reported results for FY 2001/2002 were based on recollections.

Recommendation #1: The SOP needs to be revised so that it establishes better procedures for documenting what information is supposed to be provided and how events are to be tracked and counted.

SDP 01 – Measure #7.

Emergency preparedness information is offered to all Sunnyvale schools annually. (%)

Finding #1: The reported result of 100% was not as well documented as it could have been. Staff indicated that a letter offering services was mailed to 27 City schools but no copies of the letter are available. (Note also that the total of 27 above exceeds the number 26 reported for the products in activity 452010.) Because a letter was sent to all schools, they reported result was 100%.

Recommendation #1: The SOP should be revised to specify appropriate documentation procedures and to define what constitutes “offering emergency preparedness information.”

Finding #2: The SOP does not clearly define what constitutes “all Sunnyvale schools.”

Recommendation #2: The SOP should be revised to define the schools (whether it includes private schools, pre-schools, etc.) and whether staff should include schools that are technically not in Sunnyvale but that the City serves nonetheless.

B. SDP 45202 - City Emergency Preparedness

SDP 02 – Measure #1.

90% of City facilities are inspected annually for compliance with state non-structural hazard mitigation earthquake guidelines with deficiencies corrected within 6 weeks. (%) facilities

See findings and recommendations regarding program measure #7.

SDP 02 – Measure #2.

All city departments are provided disaster response and recovery planning assistance annually (%) departments

Finding #1: The result reported for FY 2001/2002 (100%) was not as well documented as it could have been. The documentation is a list of information/training provided to staff, including the dates and the number of staff members contacted, but there is no indication of the departments assisted.

Recommendation #1: The SOP should specify that staff track the departments assisted, the type of assistance provided, and the dates when the assistance was provided.

Finding #2: The SOP does not define “assistance,” and the program management has construed that any preparation for an EMO exercise, any training sessions or pamphlets provided or any information disseminated to a person from a department would count as a “department” product. Presumably, then, the Citywide Evacuation Drill alone could result in a 100% rating for this measure.

Recommendation #2: The intent of the measure should be clarified in the SOP.

Finding #3: It's unclear how this measure relates to:

- Activity 452150 - Provide Emergency Preparedness Training to City Staff, where the product is participant trained. The reported result was 64 products;
- Activity 452170 - Provide Emergency Preparedness Planning Assistance to City Staff, with a product of Department Received Planning Assistance. Staff reported 11 departments.

It appears that these are attempts to capture essentially the same efforts, but the results could be construed to be in conflict with each other. (If all department personnel are trained per the documentation submitted for SDP 02 Measure #2, then why are 64 products reported in Activity 452150?)

Recommendation #3: Staff should consider combining all of these mechanisms for providing training/assistance to City staff into one item and establishing a clear methodology to track it.

SDP 02 Measure #3

Requests for emergency preparedness and disaster cost recovery funding are accurately prepared and accepted by state and federal agencies 90% of the time. (% of time)

See findings and recommendations for program measure #6.

SDP 02 – Measure #4

90% of EMO staff participates in the bi-annual EMO simulation exercises. (% of staff)

Finding #1: The reported result for FY 2001/2002 (90%) was not as well documented as it could have been. The reported result was an estimate based on staff's recollection of the event.

Recommendation #1: The SOP should require that a staff member track the number of participants.

Finding #2: This exercise has always been conducted annually, not bi-annually.

Recommendation #2: Either the measure should be modified or the SOP should be changed.

SDP 02 – Measure #5

A critical review of the bi-annual EMO simulation exercises by the EMO director determines that 80% of simulation exercise goals were achieved. (% goals achieved)

See findings and recommendations regarding program measure #1. Note that the wording is inconsistent with the program measure and should be changed.

Section III: Activity Findings and Recommendations

Activity 452000

Provide residential emergency Preparedness programs (SNAP Participant)

Finding #1: The reported result of 282 is not as well documented as it could be. The audit team is unable to replicate or adequately describe how the result was reached.

Recommendation #1: The SOP should be clarified to adequately detail appropriate documentation procedures.

Finding #2: Management has construed that it is acceptable to count the same participants over and over as unique products. This appears to be in conflict with the existing SOP.

Recommendation #2: Clarify the SOP as to whether the products are unique participants or the same participants at different events.

Finding #3: In the years prior to FY 2001/2002, staff counted letters mailed to individuals as products.

Recommendation #3: Clarify the SOP as to what constitutes a product.

Activity 452010

Program School Emergency Preparedness Programs (School Participating)

Finding #1: The reported result of 26 was not as well documented as it could have been. Staff indicated in Program Measure #7 that a letter offering services was mailed to 27 City schools, but no copies of the letter are available.

Recommendation #1: The SOP should be revised to specify appropriate documentation procedures and to define what constitutes a “participating school.” Is a letter mailed to a school sufficient to construe that the school is a participant?

Activity 452020

Provide Commercial Emergency Preparedness Programs (A SEPO Participant)

Finding #1: Since SEPO no longer exists, staff counted the number businesses (69) who attended commercial training sessions in May, plus 20 other businesses that staff met with individually, for a reported result of 89 products. Although it seems reasonable to report these products in this fashion, and the products are appropriately documented with training session sign in sheets and a list of additional businesses served by date, the presence of 89 products here is inconsistent with the reported “0” SEPO participants in Program Measure #8.

Recommendation #1: The SOP should be revised to note that products in this activity should be consistent with the result reported in Program Measure #8.

Finding #2: Although staff still provides some assistance to businesses, SEPO has not been active for more than three years. Staff is unclear what business-related services Council would like staff to provide, and staff believes that most businesses, particularly large businesses, do not need the services offered by this program as these services are now being provided by industry.

Recommendation #2: Staff should re-evaluate the City’s disaster preparation services to businesses. At a minimum, activity/measure definitions/products should be modified. Staff may wish to consider whether the City should provide disaster preparedness services to businesses at all. Also, since there is a willingness of businesses to pay for disaster preparedness services, the City may wish to consider charging for its preparedness services.

Activity 452150

Provide Emergency Preparedness Training to City Staff (participant trained)

Finding #1: The reported result of 64 was documented using sign in sheets from training exercises in March as well as a list of general training events, such as “Mail handling for mailroom staff.” It could have been better documented by having sign in sheets for all training events.

Recommendation #1: The SOP should clarify that the products are to be calculated using sign in sheets from training events.

Finding #2: It’s unclear how this measure relates to:

- SDP 02 Measure #2: All city departments are provided disaster response and recovery planning assistance annually, where the reported result is percent of departments;
- Activity 452170: Provide Emergency Preparedness Planning Assistance to City Staff, where the product is Department Received Planning Assistance.

It appears that these are all measures to track essentially the same efforts, but the distinctions between them are not clear and thus reported results are confusing. (For instance, documentation for SDP 02 Measure #2 indicates all personnel - about 800 people - received training in FY 2001/2002, but *this* activity shows only 64 “City staff” trained.)

Recommendation #2: It’s unclear why these different mechanisms are needed. Staff should consider combining all of this into one item and establishing a clear methodology in the SOP to track it.

Activity 452160

Provide Non-structural inspections (City facility inspected)

Finding #1: Staff reported “21 facilities” for consistency with the 100% result reported for Program Measure #7. It’s unclear what constitutes a “facility.” See additional findings for Program Measure #7.

Recommendation #1: The SOP should define “facility.” See additional recommendations for Program Measure #7.

Activity 452170

Provide Emergency Preparedness Planning Assistance to City Staff (Department Received Planning Assistance)

Finding #1: The reported result of 11 was not as well documented as it could have been. Although there is no record of which departments were assisted, there is a list of information/training provided to staff, including the dates and number of staff members contacted. Preparation for an EMO exercise, training sessions, pamphlets provided or any information disseminated to a person from a department was considered a “department” product. Based on this definition, staff reported that all departments had been assisted. This does not appear to be consistent with the existing SOP.

Recommendation #1: Clarify in the SOP what constitutes a “department assisted” and establish procedures for documenting the products.

Finding #2: It’s unclear how this measure relates to:

- Activity 452150 - Provide Emergency Preparedness Training to City Staff, where the product is participant trained. Staff reported 64 products;
- SDP 02 Measure #2 All city departments are provided disaster response and recovery planning assistance annually, where the product is percent of departments. Staff reported 100%.

Recommendation #2: Staff should consider combining all of these mechanisms for providing training/assistance to City staff into one item and establishing a clear methodology to track it.

Activity 452180

Provide Emergency Preparedness Cost Recovery Assistance (Application/Report Submitted)

Finding #1. The reported result of 0 for this activity is consistent with the N/A result reported in Program Measure #6. See Program Measure #6 for additional findings and recommendations.

Conclusion

The most worrisome finding associated with the results reported for this program in FY 2001/2002 is that the record keeping could have been better. As previously indicated, the lack of documentation does not mean that the reported results were not in fact achieved, but it exposes the management to questions of credibility that generally could have been avoided by taking more care in documenting the program's results and successes.

Many of the measures should be revised to reflect changes in the Emergency Preparedness program. As changes in the program have taken place, some measures can no longer be calculated. Moreover, the changes in the program should also be captured in the SOPs. The audit team found that the current SOPs are outdated and need substantial revisions. Without specific and accurate SOPs, Emergency Preparedness staff remains vulnerable to questions of credibility for results reported.

Appendix A: Potential Enhancements to Customer Satisfaction Survey Design

The questionnaire employed to obtain the customer satisfaction rating reported in Outcome Measure #4 is not consistent with the best survey methodologies available. Audit staff recognizes that this approach may nonetheless be the best method that is financially feasible, given that improvements to methodology increase survey cost. Below is a brief discussion of the tradeoffs that exist with the current methodology.

Numerous survey research texts caution against the practice of using “single” measures.

Asking multiple items not only facilitates the discovery of ... contingencies and qualifications but makes the (survey) less likely to fall into the trap of reporting a single number as representing public opinion on an issue.¹

The justification for using single-item measures is primarily economic: Surveys are costly, and the costs increase with the number of questions asked...however, there are good methodological reasons to prefer a composite score based on a multiple-item index.²

The survey assumes that respondents are sufficiently knowledgeable about the Emergency Preparedness program to be able to issue a meaningful response to the question. This is a more complex problem, and it encompasses multiple issues. The first issue is the vagueness of the phrase “disaster preparedness.” In order to express a meaningful opinion about the matter, respondents have to know what is meant by the term. Further, in order for the question to be valid, the term must mean the same thing to all respondents. Examples of unacceptably vague terms in surveys include such words and phrases as “breakfast,” “doctor,” and “gun control legislation.”³

The questions should all mean the same thing to all respondents. If the respondents understand the question to mean different things, their answers may be different for that reason alone. ... *The prevalence of misunderstanding of common terms has been well documented....*⁴

Numerous survey research texts counsel against using undefined terms in surveys.

What ‘family’ is to mean...may have to be specified lest respondents vary

in their frame of reference from their immediate family to their far-flung extended family. 'The neighborhood' may also have just such an elastic character.⁵

The fact that the phrase "disaster preparedness" is not defined leaves it open to interpretation by respondents whose frame of reference may vary. It could be construed to have a host of meanings beyond that which was intended. For example, a respondent might offer an opinion as to whether the City has prepared him or her personally to handle a disaster. Another respondent might opine on whether he or she feels the Red Cross has sufficient presence in Sunnyvale. A third respondent might construe the question to relate to how well ambulances or hospitals might respond to a disaster. Respondents might even construe the question to relate to such mundane efforts as traffic control in the event of a car crash "disaster."

When there is ambiguity in a question, respondents tend to "transform" it into something meaningful for themselves and answer on that basis, particularly when there is no "don't know" option.⁶

This means that respondents not familiar with the City's Disaster Preparedness program may nonetheless respond in regards to whatever disaster preparation with which they are familiar. For instance, a respondent might think of evacuation drills at his Mountain View workplace.

There is a second, related issue raised in the finding: Are all respondents knowledgeable of and opinioned about the City's disaster preparations? Whether the City's preparations for rare events can be construed – even after 9/11 – as salient in the minds of residents is debatable:

As the object of the questions gets further from their immediate lives, the more plausible and reasonable it is that some respondents will not have adequate knowledge on which to base an answer or will not have formed an opinion or feeling. ... When a notable number of respondents will not be familiar with or have thought about whatever the question is dealing with, it is probably best to ask a screening question about familiarity with the topic.⁷

To summarize, the data reported for the customer satisfaction measure in this program came from a survey that differs from best practices in that it:

- asked a single question about the issue,
- used undefined terminology, and,

- queried on a matter outside the daily lives of respondents without screening for opinion/knowledge.

While there may be good reasons why the City may choose to continue with the existing methodology, including the fact that better survey design increases the cost of surveying, staff may wish to consider requesting that the survey firm enhance the survey design to improve the reliability and validity of the results obtained.

¹ Converse, Jean M. and Presser, Stanley. (1986). *Survey Questions: Handcrafting the Standardized Questionnaire*. Sage University Paper Series on Quantitative Applications in the Social Sciences, series no. 07-063. Thousand Oaks, CA: Sage Publications. 47.

² Himmelfarb, S. (1993). *The measurement of attitudes*. In A.H. Eagly and S. Chaiken, *The Psychology of Attitudes* (pp.23-83). Forth Worth, TX: Harcourt Brace Jovanovich. 79.

³ Fowler, Floyd J., Jr. (1993). *Survey Research Methods*. 2nd Ed. Applied Social Research Methods Series, vol. 1. Newbury Park, CA: Sage Publications. 74-75.

⁴ Ibid, 74.

⁵ Converse, 18.

⁶ Converse, 56-57.

⁷ Fowler, 76.

DEPARTMENT RESPONSE TO AUDIT RECOMMENDATIONS

OUTCOME LEVEL	MEASURE	RECOMMENDATION	AGREE/DISAGREE
Program 452	#1 A review of the bi-annual EMO simulation exercises by the EMO leaders group determines that 80% of the pre-established simulation exercise goals were achieved. (% of goals)	#1: Staff should prepare a more detailed post-exercise analysis report containing pre-defined, standard features. #2: Change the measure back to "annual" or conduct two exercises per year (or one exercise every other year.) The SOP should be modified to clarify the intended frequency of the exercise. #3: The SOP should define the EMO Leaders Group, plus at least two other people who are members of EOC management from other cities or counties. Together, they should establish the exercise goals. #4: Require that the EMO Leaders Group and members of management of at least two local government EOCs submit critiques of the exercise that includes an assessment of whether each of the pre-established goals were met. #5: The SOP should require that the goals be written so that they materially "test" a key EMO function and that the goals define the criteria for being met. #6: Staff should consider whether to test a larger number of goals/functions.	1. Agree 2. Agree 3. Agree 4. Agree 5. Agree 6. Agree
Program 452	#2 80% of SNAP groups participate in a neighborhood emergency preparedness activity annually, and the number of active groups grows from 52 to 55 in FY 1997/98 and 5% per year thereafter. (% of groups and growth)	#1: The measure should be changed to reflect the number of individuals who attend training or participate in events during the year. #2: Update the SOP to match the budget; or change the measure as suggested in Recommendation #1. #4: Either the measure should be changed per Recommendation #1, to eliminate the need for the database, or staff should update and maintain the database so that it accurately captures the number of active groups and participants. #5: Change the measure per Recommendation #1 to reflect the fact that staff is training individuals. #6: Per Recommendation #1, change the measure such that "growth" in participation is not required. Instead, require maintenance of a minimum number of individuals trained in a year. (For instance, the number could be expected to be not less than the three-year average.)	1. Agree 2. Agree 4. Agree 5. Agree 6. Agree
Program 452	#3 Post-instruction surveys of SNAP and SEPO participants reveal an 85% feeling of competency in applying the provided information. (% of survey participants)	#1: The question(s) staff is expected to include in the survey should be specified in the SOP. #2: The SOP should specify how staff is to maintain documentation of survey responses. #3: The measure should be revised to exclude SEPO.	1. Agree 2. Agree 3. Agree
Program 452	#4 A satisfaction rating of 90% is achieved for Emergency Preparedness. (rating)	#1: The City should explore development of a more robust survey design. #2: Update the SOP to reflect the current methodology.	1. Agree 2. Agree
Program 452	#5 The budget/cost ratio (planned cost/actual cost) is at 1.0 (ratio)	#1: Update the SOP to reflect the current MBO.	1. Agree
Program 452	#6 Requests for Emergency Preparedness funding and disasters are accurately prepared and accepted by state and federal agencies 90% of the time. (% accepted)	#1: Consider eliminating the measure and incorporating the responsibility for this duty into the appropriate performance agreements. #2: Clarify whether the intent of the measure was to capture applications of emergency preparedness grant funds and adjust the SOP accordingly. #3: Establish clear procedures in the SOP for tracking reports/applications.	1. Agree 2. Agree 3. Agree
Program 452	#7 90% of city facilities inspected annually meet state non-structural guidelines for hazard mitigation with any deficiencies corrected within six weeks of inspection. (% of facilities)	#1: This measure should be moved out of this program and into the Risk and Insurance Division of HR, which should then be tasked with resolving any issues associated with the measure.	1. Agree
Program 452	#8 85% of Sunnyvale businesses participating in SEPO are provided assistance with emergency preparedness planning and training programs annually and the number of businesses participating grows from 220 to 225 in 97/98 and 2.5% each year thereafter. (% of businesses)	#1: If this measure stands in the future, it should not conflict with the reported result in Activity 452020. #2: At a minimum, the measure should be revised to drop the SEPO name. It may make sense for the City to re-evaluate whether to provide business-related services at all. #3: Remove the requirement that staff sustain growth. Require instead maintenance of a base number of participants (such as the average # of participants over 3 years.)	1. Agree 2. Agree 3. Agree

DEPARTMENT RESPONSE TO AUDIT RECOMMENDATIONS

OUTCOME LEVEL	MEASURE	RECOMMENDATION	AGREE/DISAGREE
SDP 45201 Community Emergency Preparedness	#1. 85% of SNAP captains are provided assistance with emergency preparedness planning and training annually. (% SNAP captains)	See recommendations for Program Measure # 2.	
SDP 45201 Community Emergency Preparedness Services	#2. The number of SNAP groups grows from 52 to 55 in FY 97/98 and 5% per year thereafter. (growth)	See recommendations for Program Measure #2.	
SDP 45201 Community Emergency Preparedness Services	#3. 85% of Sunnyvale businesses participating in SEPO are provided assistance with emergency preparedness planning and training programs annually. (%)	See recommendations for Program Measure #8.	
SDP 45201 Community Emergency Preparedness	#4. The number of businesses participating in SEPO grows from 220 to 225 in 97/98 and 2.5% each year thereafter. (growth)	See recommendations for Program Measure #8.	
SDP 45201 Community Emergency Preparedness Services (Same as Program	#5. Post-instruction surveys of SNAP and SEPO participants reveal an 85% feeling of competency in applying the provided information. (% participants)	See recommendations for Program Measure #3.	
SDP 45201 Community Emergency Preparedness	#6. Emergency preparedness information is provided at two annual city events. (Events)	#1. The SOP needs to be revised so that it establishes better procedures for documenting what information is supposed to be provided and how events are to be tracked and counted.	1. Agree
SDP 45201 Community Emergency Preparedness Services	#7 Emergency preparedness information is offered to all SV schools annually. (%)	#1. The SOP should be revised to specify appropriate documentation procedures and to define what constitutes "offering emergency preparedness information." #2. The SOP should be revised to define the schools (whether it includes private schools, pre-schools, etc.) and whether staff should include schools that are technically not in Sunnyvale but that the City serves nonetheless.	1. Agree 2. Agree
SDP 45201 Community Emergency Preparedness	Activity 452000 - Provide residential emergency Preparedness programs (SNAP Participant)	#1. The SOP should be clarified to adequately detail appropriate documentation procedures. #2. Clarify the SOP as to whether the products are unique participants or the same participants at different events. #3. Clarify the SOP as to what constitutes a product.	1. Agree 2. Agree 3. Agree
SDP 45201 Community Emergency Preparedness Services	Activity 452010 - Program School Emergency Preparedness Programs (School Participating)	#1. The SOP should be revised to specify appropriate documentation procedures and to define what constitutes a "participating school."	1. Agree

DEPARTMENT RESPONSE TO AUDIT RECOMMENDATIONS

OUTCOME LEVEL	MEASURE	RECOMMENDATION	AGREE/DISAGREE
SDP 45201 - Community Emergency Preparedness Services	Activity 452020 - Provide Commercial Emergency Preparedness Programs (A SEPO Participant)	#1. The SOP should be revised to note that products in this activity should be consistent with the result reported in Program Measure #8. #2. Staff should re-evaluate the City's disaster preparation services to businesses. At a minimum, activity/measure definitions/products should be modified. Staff may wish to consider whether the City should provide disaster preparedness services to businesses at all. Also, since there is a willingness of businesses to pay for disaster preparedness services, the City may wish to consider charging for its preparedness services. See recommendations for Program Measure #7.	1. Agree 2. Agree
SDP 45202 - City Emergency Preparedness	1. 90% of City facilities are inspected annually for compliance with state non-structural hazard mitigation earthquake guidelines with deficiencies corrected within 6 weeks. (% facilities) 2. All city departments are provided disaster response and recovery planning assistance annually (% departments)	#1. The SOP should specify that staff track the departments assisted, the type of assistance provided, and the dates when the assistance was provided. #2. The intent of the measure should be clarified in the SOP. #3. Staff should consider combining all of these mechanisms for providing training/assistance to City staff into one item and establishing a clear methodology to track it. See recommendations for Program Measure #6.	1. Agree 2. Agree 3. Agree
SDP 45202 - City Emergency Preparedness	3. Requests for emergency preparedness and disaster cost recovery funding are accurately prepared and accepted by state and federal agencies 90% of the time. (% of time) 4. 90% of EMO staff participates in the bi-annual EMO simulation exercises. (% of staff)		
SDP 45202 - City Emergency Preparedness		#1. The SOP should require that staff record the number of participants. #2. Either the measure should be modified or the SOP should be changed. The exercise has always been conducted annually but the measure calls for a bi-annual exercise.	1. Agree 2. Agree
SDP 45202 - City Emergency Preparedness	5. A critical review of the bi-annual EMO simulation exercises by the EMO director determines that 80% of simulation exercise goals were achieved. (% goals) Activity 452150 - Provide Emergency Preparedness Training to City Staff (participant trained)	See findings and recommendations regarding program measure #1. Note that the wording is inconsistent with the program measure and should be changed.	
SDP 45202 - City Emergency Preparedness	Activity 452160 - Provide Non-structural inspections (City facility inspected)	#1. The SOP should clarify that the products are to be calculated using sign in sheets from training events. #2. It's unclear how this measure relates to SDP 02 Measure #2 and Activity 452170. It appears that these are all measures to track essentially the same efforts, but the distinctions between them are not clear and thus reported results are confusing. Staff should consider combining all of this into one item and establishing a clear methodology in the SOP to track it.	1. Agree 2. Agree
SDP 45202 - City Emergency Preparedness	Activity 452170 - Provide Emergency Preparedness Planning Assistance to City Staff (Department Received Planning Assistance)	#1. The SOP should define "facility." See additional recommendations for Program Measure #7.	1. Agree
SDP 45202 - City Emergency Preparedness	Activity 452180 - Provide Emergency Preparedness Cost Recovery Assistance (Application/Report Submitted)	#1. Clarify in the SOP what constitutes a "department assisted" and establish procedures for documenting the products. #2. It's unclear how this measure relates to SDP 02 Measure #2 and Activity 452150. It appears that these are all measures to track essentially the same efforts, but the distinctions between them are not clear and thus reported results are confusing. Staff should consider combining all of this into one item and establishing a clear methodology in the SOP to track it. See Program Measure #6 for recommendations.	1. Agree 2. Agree